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Title: Temporal Ontology and Joint Action

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I have no conflicts of interest to declare in connection with this paper.

## Abstract

The aim of the paper is to describe the temporal ontology of that basic manifestation of social agency that is the living of life together. The distinction between states, processes and events is clarified. There are notions of ‘doing things together’ that fall into each of these temporal categories. The ontology of the state of friendship is examined as one instance of living life together. Friendship is a state of community between agents that is sustained by a continuity of processes and events that are characteristic manifestations of the state, some (but not all) of which are processes of doing things together. The continuity of processes and events involved in friendship is distinctive in lacking a telic point. Further instances of shared life that possess this characteristic temporal structure are described. It is argued that this notion of a mode of shared life cannot be recovered from the various kinds of temporally extended agential structures that are the ingredients of Michael Bratman’s work on shared agency. In so doing, I clarify the notion of a shared life, and make a case for the fruitfulness of approaching questions about joint action from the perspective of work on the ontology of time-occupation.

## Keywords

Temporal ontology

Processes

States

Events

Joint action

Shared intention

Planning theory

# Temporal Ontology and Joint Action

## 1. Introduction

This paper takes as its point of focus the notion of doing things together.<sup>1</sup> In sections 2 and 3, I distinguish between some different varieties of doing things together with respect to the way that things in those categories occupy intervals of time. In section 4, I will go on to make some suggestions about how the relevant notions of doing things together are related, at least, when we pull focus to some very general temporal features of the lives of social animals, features which are manifest in the temporal ontology of a state such as friendship.

Much of the discussion of joint action in the literature has focused on joint intentional action.<sup>2</sup> The nature of such action is not the main subject of my discussion here. But in section 5, I compare features that emerge from the temporal ontology I sketch out in earlier sections of the paper with some of the elements of an account of joint action of such a kind; the account of shared intentional action found in Michael Bratman's work. I shall suggest that there seem to be difficulties with understanding some of the temporally extended structures that emerge in sections 2- 4 in the terms of Bratman's approach.

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<sup>1</sup> This paper is a descendent of a talk given at a workshop of the project 'Joint Practical Knowledge: Shared Agency and Knowledge of Other Minds' which was held in Santiago, Chile, in December 2016. Thanks very much to Johannes Roessler and Glenda Satne who ran this project, organized the workshop, and for very helpful discussion and comments on the occasion. I am grateful to two anonymous journal referees for their extremely helpful comments and suggestions, and also to the participants of the Santiago workshop, in particular Guy Longworth, Naomi Eilan, Sebastian Rodl, and Abe Roth for their excellent comments on the original paper. Thanks to Hemdat Lerman and the participants of a postgraduate research seminar at the University of Warwick for very helpful comments and discussion. Thanks also to Matthew Soteriou for very helpful discussion of the ideas in this paper over a number of years.

<sup>2</sup> For examples of such work see Bratman (1999, Part 2, 2014); Gilbert (1990, 2000, 2009), and Searle (1990).

My main aim in doing this is not to generate counterexamples to Bratman's work. It is to try to more deeply understand aspects of the ontology identified in the earlier parts of the paper, and to attempt to demonstrate that it may be fruitful to approach shared intentional action from the perspective of a temporal ontology that is sensitive to the kinds of distinctions between the ways that different aspects of reality occupy intervals of time.

## **2. States, Processes and Events**

Some different notions of doing things together emerge from some quite general distinctions that can be drawn within temporal ontology. We might begin with the distinctions that Alexander Mourelatos (1978) draws between the categories of states, processes and events.<sup>3</sup> Examples of states, or conditions, are such things as belief, or solidity. Processes are such things as running or walking, while examples of events are the sinking of the Titanic or the birth of Aristotle.

The source of these distinctions is the way that these things occupy intervals of time. We might begin with the distinction between states on the one hand, which are non-occurrent, and processes and events, on the other hand, which occur. States may be present over intervals of time. But where a state, such as solidity, is present over an interval, it does not occur over that interval, but obtains. Processes and events (at least where we are talking about temporally extended events like the sinking of the Titanic) are necessarily extended over intervals of time. But by contrast with states, processes, like running and walking,

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<sup>3</sup> The treatment in Mourelatos (1978) builds on influential discussions in Ryle (1949, 1953), Kenny (1963) and Vendler (1957(1967)).

and events like the sinking of the Titanic, do not obtain over intervals of time. They occur or unfold.

Though both processes and events occur or unfold over intervals of time, and in this they differ from states, it is familiar for a distinction to be drawn between processes and events. The nature of the distinction is controversial, and a topic that is contested in the contemporary literature.<sup>4</sup> My view is that the distinction is best approached through a particular kind of analogy between spatial and temporal notions of stuff, or mass, and particular countable objects, an analogy that Mourelatos suggests in his 1978 paper, though does not develop in much detail.<sup>5</sup> According to this analogy, processes, such as running and walking, are temporal analogues of space-filling stuffs like gold, water and bronze. Process is mass quantifiable not count-quantifiable. There cannot be one or two running(s), at least without changing the notion of running that is at issue, in the same way that there cannot be two gold(s) or more than one water without changing the notion of gold at issue. There can be some running, more or less walking, or enough running (enough to make a runner tired, say), in the same way that there can be some gold, more gold, less bronze or enough water. Time-occupying events, such as some particular capsizing of the ship, or the Battle of Salamis, are completed stretches of process. They are concrete temporal particulars that are the temporal analogues of concrete particular material objects. There cannot be more of the Battle of Salamis, in just the same way that there cannot be more of a human being, or of a cup of coffee. Rather, events fall under types under which they can be count-quantified rather than mass quantified. There can be one or more battle or capsizing of a ship.

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<sup>4</sup> For some different approaches to this issue see Stout (2016), Steward (2013), Crowther (2018), and the essays collected in Stout (2018).

<sup>5</sup> For an attempt to develop this analogy see Crowther (2011). For discussion of these issues as they bear on an understanding of the notion of 'experience', see Soteriou (2018).

On this approach, we can think of process as something that has the logic of a ‘temporal mass’ of which events with temporal duration are constituted, where such mass—in virtue of the difference in ontological category to which it belongs—is distinct from the temporal particulars that it constitutes. Process, as so understood, is not countable, while events are.

A few caveats and qualifications are necessary. Someone who adopts this approach, I emphasize, is only committed to an *analogy* between these two notions that revolves around relations between notions of mass and count. The idea is not that there are no distinctions between entities in the spatial and temporal categories, or that events like capsizings of ships are to be understood as being material particulars that persist through time just like concrete material objects do. Second, though the claim is that process is not countable, it is perfectly possible to count *types* of process, such as running, walking and writing, and also to count *stretches* or *phases* of process, for example, five minute stretches of walking or running.

### **3. Some varieties of doing things together**

In the light of this framework, it seems clear that there is no single ontological category into which doing things together falls. There are states, processes and events that can be characterized as states, processes or events of doing things together.

Let us begin with states. Amongst states or conditions of doing things together might be such states as: friendship, cooperation, partnership, political or civic association, and more basic biological states such as eating together or hunting together (where these are

understood as ‘habitual states’, such as the state of being a smoker.<sup>6</sup>) In each of these cases, we are dealing with something that does not occur but obtains over time.<sup>7</sup> Let us say that the general form of these ‘doing things together’ state-types is that the individual subjects, agents or groups related in these ways are in *community* with each other.<sup>8</sup> Different modes of community might then be individuated with respect to the way in which those individuals are in community, or what they are in community with respect to.

Here is a simple example. Suppose that a group of wild dogs hunts together. These dogs are in, in hunting together, in a state of community. Specifically, they are in community with respect to their hunting. Being in community with respect to hunting at least involves some kind of a disposition. Animals that hunt together are disposed to engage in a form of coordinated activity directed at nutrition. Note that for wild dogs to hunt together in this stative sense, at some time *t*, does not seem to require that they are doing any hunting at *t*. It can be true of a group of wild dogs that they hunt together even though they are not actively hunting, for example, when they are all curled up asleep. On the face of it, a state of community of this kind is perfectly capable of pulling its weight in explanation. That this group of wild dogs hunts together might be what explains why, on some particular

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<sup>6</sup> For classic discussion of such habituals see Ryle (1949, p.43, p.126-9) and see also Comrie (1976, p.24-32).

<sup>7</sup> One might raise questions about this. Can’t friendship unfold over time? Well, a friendship might occupy a more or less lengthy interval of time. But that does not establish that friendship unfolds over the time that it exists. Again, can’t it be true that a friendship grows and develops over time, and doesn’t that show that it is something that occurs or unfolds. But that friendship can develop doesn’t entail that friendship is something that unfolds or can occur. Plants can grow and develop. That is not a reason to think that plants unfold or occur.

<sup>8</sup> The idea of individuals ‘being in community with one another’ is clearly very abstract. The substance of the notion of things being in community with one another is intended to emerge through reflection on different varieties of the state. Perhaps what can be said about the most general notion of such a state is: (i) it is relational; (ii) it is a state that is instantiated in virtue of individuals ‘being together’, in a way that must be made determinate in some way; and at least in the kinds of cases discussed in this paper (iii) it is a relation that depends for its obtaining, throughout the time it obtains, on a continuity of processes and events that occur in a way that manifests the relevant mode of togetherness. (See section 4(a) below) The content of (iii) should alert the reader to the fact that I do not assume that such states can be reductively explained in terms of specific processes or occurrences, understood independently of the notion of the state itself. That this explanatory interdependence is egregious is something that would have to be argued for, rather than just assumed.



occasion, all the dogs wake up from sleep together at round about the same time in the morning, and set out from their den, one after the other, in close formation.

Even if there is a state of such a kind, doing things together is perhaps most naturally understood as singling out not a state but a process of some kind, or at least a family of types of process. For a group of animals to hunt together in this sense is not for them to be disposed to hunt but for them to be hunting together, in the sense that there is some nutritionally-directed process going on. Similar examples include singing a duet, fighting, engaging in a conversation, and negotiation. Each of these things falls into the broad category of occurrence. Such processes have temporal extension over an interval, and occupy that interval by unfolding or going on over that interval. But they are examples of process rather than of events. On the view of the distinction I have suggested the analogy between process and mass is the key to seeing this. Such things as hunting together and negotiation exhibit the connection with mass quantification that is distinctive of process rather than event. There can be some, or more, negotiation. There can be more hunting together. But there cannot be three negotiation(s) or several hunting(s) together, at least without changing the meaning of the noun by introducing implicit count quantifiers associated with events; such as ‘episodes of...’

Within the category of process so understood one might distinguish further between atelic process and telic process (or ‘accomplishment’ in the terminology of Zeno Vendler (1957[1967])) Telic process is processive occurrence that unfolds towards a telic point, a point determined by the nature of the activity that serves as a way to determine whether this occurrence is a success or failure, and the achievement of which brings the occurrence to completion. Examples of telic processes of doing things together would be: chasing an

antelope off a cliff together, or the pack bringing down a sick wildebeest. By contrast, atelic processes are ‘pure’ processes, not organized according to a telic aim at which the activity is directed and which serves as a criterion of success or failure for the process. Examples of atelic processes in this sense might be running around together, playing together, circling the isolated wildebeest together, and, at least in one sense, hunting together. Various kinds of grammatical cum metaphysical tests, broadly inspired by passages of *Metaphysics*  $\Theta$  6 can be introduced in order to characterize the differences between these two varieties of process. For example, where  $\Phi$ -ing is an atelic process, for S to be  $\Phi$ -ing at t entails that S has  $\Phi$ -ed at t, but where  $\Phi$ -ing is an accomplishment, for S to be  $\Phi$ -ing at t entails that S has not yet  $\Phi$ -ed at t. For various reasons, these tests are not completely diagnostic, even if they are suggestive. For our purposes, a characterization in terms of telic points the achievement of which constitutes success or failure will do.<sup>9</sup>

Events of doing things together are complete and finished stretches of process. These come in different varieties. An event of hunting together, by contrast with the process of hunting together, is a temporal particular that is a finished stretch of hunting, say, the hunt that took place over two hours, over one night in November 2019, of which several animals were the participating agents. This event can be picked out in different ways, by different kinds of singular terms: the event which allowed the pack to eat well for three days; a particular sequence of chasings and killings of antelopes; that event during which the alpha male of some particular pack picked up an apparently innocuous scratch that became infected and led to his death. A hunting event of this kind occurs just in case there is some hunting together over some interval of time, which comes to an end, so that a

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<sup>9</sup> For more detailed discussion of these issues see Rothstein (2004). For an attempt to explain the distinction between process and accomplishment by developing aspects of the analogy between mass and count notions see Crowther (2011).

stretch of hunting is complete. The completion conditions for an event of hunting together are, in this way, not restrictive in the way that those for the occurrence of an event of bringing down a wildebeest are. For there to be a complete event of bringing down a wildebeest together, there must be a stretch of telic process which terminates with the death of the animal, the occurrence which functions as the point of completion of the accomplishment. As well as events that are complete events of these kinds, there may also be temporal particulars that are botched, failed, bringings down of wildebeest. These events are complete temporal particulars in their own right, though given that the telic point of the accomplishment was not reached, they are mere maulings or injurings, say, rather than killings.

#### **4. Living life together**

Both the states and processes that have been at issue so far are relatively simple in a certain respect. Take the state of hunting together. For wild dogs to be in community with respect to their hunting entails only harmony in how they take on nutrition and certain kinds of co-ordination involved in such joint activity. But other kinds of states of community seem to implicate much more extensive and varied modes of practical engagement. Here one might single out for example, friendship, partnership, being in community with one's family, being in civic or political community with others, or being in community with other rational beings, as members of the kingdom of ends. What do states of these types involve? Claims (a)-(g) set out some key features of the temporal ontology of such states, and of the type of process at their core.

(a) Recall that states don't occur over time, they obtain over time. But though states do not occur over time, they obtain, and though paradigmatic states such as solidity or fragility do not require that anything at all occur at the time that the state obtains, the obtaining of some states does require that certain events or processes occur over the time that the state obtains.<sup>10</sup> For example, the state of white heat necessitates the occurrence of certain physical processes over time; of molecular motion of certain kinds. Notions of community like friendship, being in community as members of a family, civic and political community, are notions applicable to living beings. For individuals to possess these states requires that something is going on over the time that individuals are in them. Let us call what must be going on the 'living of life together', or 'living a shared life'. We can then distinguish between varieties of such shared life by distinguishing between living life together *as* friends or *as* members of a family.

(b) As so understood, living life together falls into the category of process.<sup>11</sup> It is not something that obtains but something that occurs or unfolds over an extended interval of time. Though there may be a highly temporally extended event that is the complete, many-parted, temporal particular that occurred from the beginning to the end of a friendship, any such event is distinct from living life together. Living life together exhibits the connections to mass-quantification that a complete life does not. There cannot be three living life together, like there cannot be three bronze. But there can be some living of life together and more of it, like there can be more gold, bronze, or indeed, more running.

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<sup>10</sup> For the identification and development of this idea about states and processes, and for applications to a range of issues in the metaphysics of mind and action see Soteriou (2013).

<sup>11</sup> This is not to imply that 'living life together' doesn't have a stative reading, according to which it could pick out a what I have called a 'state of community'. Particularly in the present tense form 'live life together', such a reading is natural. Rather, given the way this notion was introduced in (a), I want to just stipulate the process or activity reading, in order to enable me to make the relevant ontological distinctions clearer, and to be precise about the idea that a 'state of community' depends upon the occurrence of processive continuity of a certain kind.

Life lived together is an instance of atelic process rather than simply highly temporally extended telic process. There is no achievement external to the living of life together at which life lived together is aimed, such that the achievement of this constitutes a telic point determined by the nature of the process at which it must cease, and at which point we can say that such living was finished. Invoking the tests from *Metaphysics* Θ 6 indicates something of this kind. If, for example, Seth and Evan are living life together at  $t$  then they have lived life together at  $t$ . Seth and Evan cannot get half way through living life together.

(c) Living life together can't be finished, but it can stop. For the living of life together to stop requires breakdown of the state of community. Some terminations of states of this kind may be very clear-cut, and consist in the occurrence of very particular events. One kind occurs when one of the agents dies.<sup>12</sup> Other examples of clear-cut breakdowns will be those in which the obtaining of the state of community between agents is partly institutional, and in which these states break down in individuals resigning or being removed from office. Non-institutional states, such as friendship, exhibit different kinds of breakdown. Some breakdowns of friendship are sudden and clear-cut. Roger tells Phil he

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<sup>12</sup> I thus understand states of community as relations which are existence-entailing. Perhaps this might be queried. One relevant thought here, put to me by an anonymous referee, might be that a close friendship might survive death, and that various things that one does, after a friend's death—honouring them in various ways, for example—might be explained by the persistence of one's friendship. One might make the same point about love. (I take it that the thought here is that the state may not be extensional, rather than that the friendship or love continues to take some extensional object). I would respond that in these cases the relevant explanatory work can be done by affective and emotional states that were constitutively involved in the original relation, but which now survive independently of the relation.

I do not think it the job of the philosopher to stipulate talk of the survival of friendship or love beyond death out of existence. But I do think that what survives, however meaningful, significant and action-determining it may be for the individual, is something less than the original relation; something that needs to be characterized at least in part, in terms of loss. I also want to emphasize here that such remarks are completely independent of any commitments about the ways in which those who have suffered such loss live with that loss. I will always think of the friends of mine who have passed away as my friends, and of my deceased grandparents as those that I love. It is unthinkable to me that I should stop thinking in this way.

voted for Brexit. Even if Roger doesn't know it, and even if they may still be found in the same pubs on the same night, things are, as of that moment, over between them. But in most cases in which it occurs, breakdowns of friendship aren't normally like this. In many cases, friendships gradually deteriorate as the demands of work and family life shrink the time available for socializing. In many of these cases, friendships might survive for relatively long periods in degenerate forms, in which they fail to be the kinds of relationships that they should be, given that they are friendships. Then they either need to be revived or they disappear.<sup>13</sup>

(d) Living life together, then, in lacking a point of completion internal to nature of the process, cannot be understood as telic process. And its connection to mass quantifiability demonstrate that it cannot be understood as an event (whether a bounded stretch of either atelic or telic process). However, life lived together over time can be *constituted* by shared telic processes, or events, that occur during intervals of the time that life is lived together.<sup>14</sup> It may also be constituted from atelic processes that differ from living a shared life, and states that obtain over intervals. In general, life lived together is a kind of processive continuity that has such processes, events and states as constituents.

Here is an example of a part of this. Suppose that Seth and Evan, who live life together as friends, walk home from Jules's party together late at night, and that they finish walking back home together at 2am. At 1.30am they were still walking back from the party. And at 2am an event of the type 'a walk back home from Jules's together' was completed. Their

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<sup>13</sup> See fn.17 below for further discussion relevant to these ideas.

<sup>14</sup> The idea that life lived together may have shared telic processes or events as 'constituents' I understand to be just the claim that such processes and events are parts of such a life. I do not take such a notion of constitution to imply that these parts are 'explanatorily basic'; that is, that it is possible to reductively explain the notion of the living of a life in terms of the relevant parts, independently of the notion of such a life. Neither do I think that the nature of the continuity of processes and events required for a state of community of the relevant kind to obtain can be explained independently of the state itself (see fn.8 and section 4(a)).

walking home from the party is an instance of telic process. As such, it cannot be identified with the living of a shared life, which is not. Neither can the walk that is the temporal particular that was complete at 2am be identified with that life. Living a life is not a temporal particular. Unlike the telic process of walking home, and the complete walk that this process constituted, the living of shared life did not terminate at 2am. It persisted. At 2am, there was some more life lived together to come. When Evan wakes up in the morning wondering whether Seth's hangover is as bad as his, and when Seth groggily dials his number shortly after waking, these events do not bring the state of community *qua* friends and the processive continuity of their shared life back into existence. That state, and that continuity, persisted through their drunken sleep. On waking, there is more of the same as what was going on before 2am, as they were walking home, and before they fell asleep.

(e) When life is lived together *qua* friends, the processive continuity that unfolds does not have to consist of particular process types, say, running together or eating together. This is one difference from such states of community like hunting together, the individuation of which involves one relatively determinate shared process-type.<sup>15</sup> Rather, life lived together as friends consists of processes, events and states such that the types of processes or events that unfold and the states that obtain over time, as well as the way that those constituents are ordered in time, are manifestations of the state of friendship. And such manifestations can belong to many different, more specific types.

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<sup>15</sup> That hunting together is a state the individuation of which involves the occurrence of a single relatively determinate shared process-type does not entail that it does not contain, as constituents, other shared process-types, such as walking in single file to the hunting grounds together. It is difficult to delineate precisely the grounds on which *hunting together* is a relatively determinate process-type, by comparison with *doing the kinds of things that we do together, given that we are friends*. But it nevertheless seems evident to me that there is some relevant difference of determinacy here, however that difference is to be accounted for.

It is a natural enough thought that at the core of such processive continuities are processes of doing things together. Seth and Evan mess around together in home economics class, then club together to buy some fake ids so they can go and get some drink to take to Jules's party. Once they have done this, they set off to the party together. But not all of the events and processes that are constituents of life lived together as friends are processes of doing things together, like walking back from Jules's party together. For example: Seth asks his mom if it is ok for Evan to sleep over. Or, Evan, who's waiting in the cafeteria for Seth, tells Fogell, who tries to sit next to him, that that seat is already taken. Or, Seth gets excited about the mint condition Boba Fett helmet he bought on eBay, which he's going to give Evan for his birthday. He imagines his surprise and delight when he opens the parcel. These are not things that Seth and Evan do together, in the specific sense of processes of doing things together. Nevertheless, they are constituents of their shared life, of the life they live together. And they are constituents of their shared life because they are manifestations of their friendship.

(f) When doing things together, in the specific sense of joint process, occurs as a constituent of life lived together, and so manifests the relevant state of community, then it occurs in such a way, and against such a background, that all things being equal, it will happen again. When individuals share a life then their joint activities and actions occur as part of a processive continuity in which things are done together repeatedly. In the case of animals that hunt together, their hunting together, on any one particular occasion, occurs against the background of a form of life for which repeated hunting is the norm. When



animals related in this way hunt together, then all things being equal, they will hunt again. And they *ought* to, given how they are related.<sup>16</sup>

Something similar occurs in the case of friendship. When friends do things together, in the sense of engaging in joint activity together, their doing what they do occurs against the background of a continuity in which things are done together repeatedly. This need not be understood in terms of the idea that friends always repeatedly do the very same types of things together—getting coffee together, gossiping about the people they dislike together—though many of us do. It is that when any of these things are done, as a constituent of the shared life of friends, it is one manifestation of a pattern, of those in a state of community repeatedly doing things together.<sup>17</sup>

The way in which such joint activities are repeated in shared life does not involve continuous processes of doing things together, in the sense of gapless joint activity.

Aspects of this temporal structure seem to reflect the fact that no matter how intimate a

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<sup>16</sup> The normativity that I allude to here is neither moral nor rational, but natural, where ‘natural normativity’ involves the idea that there is an ‘ought’ determined by what kind of state (or living being, property, or process) something is, and what it is for it to be fulfilled or to exist in its fullest and most complete way. These Aristotelian ideas are, of course, controversial, and I can’t defend them fully here. For related applications of these notions in contemporary discussion, though, see Foot (2001) and Thompson (2008).

<sup>17</sup> There is a certain degree of idealization and simplification involved here. The kind of friendship discussed in this paragraph is ‘relatively close friendship’. In the face of this, someone might want to insist on a place for friendships that can survive even in conditions of geographical separation and the loss of contact details on both sides, in which there are no such patterns of repeated joint activity.

One strategy here might be to maintain that these are not cases of genuine friendship. A different strategy might be to distinguish between degrees of friendship, and accompany this with the idea that in such circumstances, friendship can continue to obtain in virtue of the truth of various counterfactuals; for example, that one remains friends with someone with whom one has lost contact, because one would call, were one to discover their number, and the call would be warmly received, or, were one to stumble upon their email address, then one would write to them, and renew contact. I see no reason to insist on the first strategy, given our ordinary conception of friendship. The second strategy raises questions about how the relevant counterfactuals are to be constrained.

What I would want to emphasize in the face of cases of this kind, though, is just that they do not threaten the idea that the notion of repeated patterns of joint activity occupies an explanatorily central place in our everyday conception of friendship. Given the concession that cases of this kind involve the persistence of friendship, it still seems that we understand these cases, essentially, in terms of what they are not: that is, in terms of the idea that they are relations which involve specific kinds of departure from cases of friendship that involve such repeated joint activity. They are unusual or degraded forms of a basic kind of friendship relation.

shared mode of life may be, agents are embodied, finite creatures, creatures which tire and need rest, and so necessarily cycle through waking and sleep.<sup>18</sup>

(g) If individuals live life together *qua* friends or *qua* members of a family then each lives his or her own life, where to live a life in that way does not entail any particular facts about the life of the other. So also, if two individuals are in a state of community *qua* friends, then there are a range of non-relational states that each must be in, perhaps, having certain values, intentions, desires, states of character and so on. I do not assume that it is possible to conjunctively understand the notion of living life together in terms of facts about two lives, plus a set of facts about how those lives are coordinated that can be specified without reference to a shared life, or to the state of community that is a part of the complex involved in shared life. So also, it is no part of the present suggestions that the state of community *qua* friends can be explained in terms of a set of facts about the non-relational states of each individual plus some further set of facts that can be specified independently of the notion of the state of friendship or of a life lived together as friends.<sup>19</sup>

## **5. Bratman (2014) on Modest Sociality and Shared Intentional Agency**

I want now to look at aspects of Michael Bratman's views about shared agency in the light of some of these ideas. I focus on the presentation of these views in Bratman (2014).

Bratman (2014) characterizes his project as attempting to provide sufficient conditions for shared agency by providing an analysis of shared intentional action, where the primary

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<sup>18</sup> Here the processive continuities involved in forms of friendship bear relations to other interesting examples of multi-agent process. A very primitive instance of this, for example, is the process of the preservation of a species through reproduction. Where an instance of reproduction occurs as a constituent of the preservation of a species through reproduction, the occurrence of reproduction at time *t* implies that there will (all things being equal) be future instances of reproduction.

<sup>19</sup> For further discussion relevant to these issues see Longworth (this volume).

targets of such an account are small-scale cases of shared action, such as painting a house together or travelling to New York together. The account that is offered—‘modest sociality’—is an attempt to demonstrate that the contents, structures and norms associated with individual planning agency provide a sufficient basis to explain cases of shared intentional action.<sup>20</sup>

At the core of the modest sociality Bratman (2014) outlines is the notion of shared action as involving shared intention.<sup>21</sup> For you and I to share an intention to walk together involves both you and I having intentions in favour of this activity, intentions in favour of that activity unfolding through our intention to engage in it, and through our mutual responsiveness to one another in walking. In such responsiveness, our having shared intentions thus involves a kind of ongoing sensitivity to one another and what we are doing; ensuring we don’t get in one another’s way, for example. It also involves you and I having intentions in favour of walking together by way of meshing sub-plans of the intention of each of us in favour of that activity, plans for the bringing off of phases of that activity that cohere with one another, perhaps in ways which involve flexibility with respect to these arrangements. A shared intention to walk together also involves each of us having the belief that we will perform such walking together through these intentions and through our responsiveness to one another, and the belief that the persistence of each of our intentions depends on the persistence of the other. For there to be the shared intention to walk together, all of this must also be public knowledge between us. Further, and finally, putting such shared intentions into action requires that there is an ongoing mutual

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<sup>20</sup> Bratman argues that an approach that is conservative in this way is methodologically preferable to the kind of approach developed, for example, in work by John Searle and Margaret Gilbert, who attempt to explain shared intentional action in terms of elements that do not have application at the level individual agency.

<sup>21</sup> The paragraph that follows presents, in a compressed fashion, claims developed in Bratman (2014, chapters 2 and 3)

responsiveness of our intentions and actions to walk together that is sensitive to the end intended by each of us, that we act by way of the intentions we each have.

How does the notion of shared intentional action relate to the kinds of structures of doing things together that have been the object of discussion in the first part of the paper?<sup>22</sup> Let us concentrate on an example. Suppose a group of diplomats, representatives of two countries at war with one another, meet to negotiate a ceasefire in a bloody engagement that is wrecking both countries. Their negotiations, both sets of diplomats hope, are the first manifestation of a ‘relationship reset’. They have to work together to negotiate a ceasefire, mindful that in both countries there are conservative forces at work in the army, in the media, and in the population, opposed to peace and that the terms of the ceasefire negotiations, and its conduct, need to be able to be ‘sold’ to these nationalist elements. These diplomats share the intention to successfully negotiate a ceasefire, and over five days, that intention is manifest in a series of meetings that flexibly execute sub-actions that contribute towards achieving the aim of the shared intention. We can assume that the sharing of this intention over the period of several days entails that various events and processes go on which are directed at the bringing about of the end of the shared intention.

Shared intentional actions, like the successful negotiation of a ceasefire, involve a number of different kinds of states of community. Those who share an intention are in community with respect to the aims of their intentions. This state of community is what guides the progress of the negotiations towards the achievement of the aim of the intention. The different varieties of mutual responsiveness that figure in the discussion in Bratman

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<sup>22</sup> I’m particularly grateful to two anonymous referees, whose questions and comments have been very helpful with respect to the discussion in this section. I have also benefitted from thinking through the very interesting discussion offered in Satne and Salice (ms, under review), a paper which develops and applies ideas from Satne and Salice (2015).

(2014) also seem to be states of community of some kind. Responsiveness in sub-plans involves being in community with respect to the achievement of the aims of their shared intentions through flexible meshing of sub-plans involved in the achievement of the overall goal. A more basic kind of mutual responsiveness involves those negotiators being coordinated with one another physically, as embodied agents who share a physical space and a field for verbal communication. Agents who are related in these ways don't try to cram through the same small door at the same time and they coordinate their talking so they don't talk over the top of one another.<sup>23</sup>

But I want to note some differences between states of community of this kind—and the activity and sub-activities involved in them—and those that figured in sections 2- 4. Claims (a)- (d) set out some key differences.

(a) Earlier the discussion focussed on the community involved in personal friendship. Now let us take 'international community', or political friendship between the governments and representatives of the governments of different nations. If the negotiations just described do constitute a 'relationship reset' between the two nations then, as those negotiations proceed, the background condition of community that is gradually assembled, is a state of this kind.

Note that this state of community is a different state from that which obtains in virtue of the diplomats' shared intention to negotiate a ceasefire. For that shared intention

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<sup>23</sup> Sleep talking is a common childhood disorder of sleep, in which there is out loud vocalization during sleep. Put two children who sleep talk in the same room as one another and when they fall asleep they will sleep talk (nonsense) together. (See Horne (2007, p.254) There is a fundamental form of mutual responsiveness that is a necessary condition for shared intentional activity that such co-sleeping children do not share while asleep, even if they are mutually responsive in such minimal ways. Such mutual responsiveness arguably requires being wakefully conscious, and the availability of capacities that is distinctive of that condition.

terminates when the signatories of both sides sign the declaration that indicates the acceptance of the terms of the ceasefire. This termination is proper to the negotiations: it is fixed by the content of the shared intention. The examples of shared intentional actions on which Bratman (2014) concentrates the majority of his attention are also of this kind. They are ‘telic’: going to New York together, painting a house together.<sup>24</sup>

But international community and the continuity that occurs in virtue of the obtaining of international community, like friendship and the shared life of friends, does not have this telic structure. If the negotiations do succeed in establishing a ‘relationship reset’, then even as the diplomats have concluded their duties as signatories, that state, and the continuity it entails, persists. If there is international community, then there is a processive continuity of shared political life on which it depends. And if that is the case, then on the conclusion of the negotiation there is more of that shared political life to come. Unlike the state of shared intention with respect to negotiating the ceasefire, and like the life lived as friends, there is no feature of that state or of the processive continuity on which it depends that determines a telic point the achievement of which is the proper point of completion of international community. The continuity is atelic. The only thing that can bring such a processive continuity to an end is the breakdown of international community.

(b) When activities occur that manifest states of community like friendship and international community in a way that meets the ideals associated with the kind of continuity, this implies that they will (all things being equal) occur again. That there is international community between the representatives of two nations who meet to negotiate this ceasefire implies that all things being equal they will participate in smaller-scale

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<sup>24</sup> This is not to rule out that Bratman might hold that there are shared intentional actions which are atelic. For discussion of this see section (c) below.

shared intentional action like face-to-face dialogue and negotiation, again. It also entails that those individual actions and processes go on which the participants recognize are necessary for bringing it about that there is the repetition of such negotiation and dialogue. To the extent that political community does obtain, then after the ceasefire has been negotiated, the diplomats of each countries have work to do in creating the conditions whereby such a ceasefire can be built on, and further constructive discussion can take place. This might involve the individual negotiators finding their own ways to explain and sell the ceasefire in a way that is acceptable to aggressively nationalist aspects of society.

But the structure of the states of shared intention and the shared activities the unfolding of which satisfies their aims, though, seems to be entirely neutral with respect to these activities being things which will or ought to happen again. It is true that in satisfying the shared intention to negotiate a ceasefire the diplomats had to meet repeatedly, over a number of days. But those diplomats do not stand to one another in relations which implicate themselves in a set of patterns of activity over a much longer period of time, just by their being in community with one another with respect to sharing the intention to negotiate the terms of a ceasefire. These long-range temporal commitments seem to be contributed by the fact that their negotiations are the gradual reconstruction of the state of international community. The point emerges more clearly when we reflect on the fact that it is possible for diplomats to successfully negotiate the terms of a ceasefire, and so manifest the state of community with respect to shared intention, in circumstances in which the negotiations are an elaborate sham—involving the same planning and mutual sensitivity to the shared aim of negotiating a ceasefire—directed, on both sides, not at international community, but at deception of their fellow negotiators.

The upshot appears to be that the particular temporal characteristics of the kinds of structures of agency involved in such things as international community between representatives of countries are not straightforwardly explicable as shared intentional states and the joint activities that occur directed at the fulfillment of shared intentional states.

(c) There are various suggestions open to the adherent of Bratman's view as to how states of international community might be accommodated within the terms of the planning account.

Many shared intentional actions occur as parts of more complex intentional actions. Take the ceasefire negotiations that we have been talking about. Suppose that one part of those ceasefire negotiations was agreeing on halting arms productions and to the holding of mutual arms inspections, for two years. This, suppose, was negotiated over the first couple of days of the talks. (Perhaps such an initial agreement was needed to create a background of assurance that the ceasefire would not just be used as a period during which covert rearmament could take place). But by extension, perhaps there is now room to conceive of the negotiation of the ceasefire itself as a sub-plan of a more temporally extended shared intentional action or a more temporally extended project. If that is the case, then the termination of the negotiations does not bring that project to an end, in just the way that the negotiation of the halt in arms productions and the mutual arms inspections did not bring the project of diplomatic negotiation to a point of termination.

The difficulty is to see what such a shared intentional action or project might plausibly be. If this larger intentional action, or international diplomatic project, has a telic point then it



cannot be identified with the processive continuity characteristic of international community. If it is not a telic process or project then the most obvious candidates suffer from different problems. One proposal is that the atelic process in question is that of intending that the state of international community is maintained in existence. This is certainly an intention that the diplomats at the cutting edge of negotiating the cease-fire have, even as they fly back to their home countries upon the completion of negotiations.

The difficulty with this suggestion is not that it is circular.<sup>25</sup> It is that it does not in itself say anything illuminating about what the state of international community is. And if it does not say anything illuminating about what the state of international community is, it remains open, given this suggestion, that such a state of community is a form of sociality that plays an explanatory role with respect to joint action that competes with the explanatory aims of the planning theory.<sup>26</sup> There are further questions to press concerning the requirements on bearers of the relevant intention. It is an application of a familiar point that it is implausible to suppose that the atelic processive continuity involved in international community requires every agent involved in such process to bear such intentions to maintain international community: low-level staffers and those whose activities provide the substance of the implementation of the diplomats' intentions (and so are thereby part of the shared political life of the two countries) plausibly lack such high-level geo-political aims.

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<sup>25</sup> The question about whether Bratman (2014) intends his own account of shared intentional action to be non-circular is subtle, and engaging with it fully would require much fuller discussion of the nature and scope of the planning theory than I can offer here. Bratman (2014: 45-6) for example, suggests that he is happy for his account to make reference to the notion of *joint activity*, where such reference is a mode of specification of action which neutral with respect to the intentionality of the activity. He suggests, further, that the existence of such notions of action can be put to work in making sense of joint activities that only have intentional specifications. But this raises further questions. For instance, if 'joint activity' is not a mere abstraction from shared intentional action, why should shared intentional action, rather than joint activity, be the most basic form of sociality or shared agency? These are questions that cannot be pursued here.

<sup>26</sup> See section 6 below for further discussion of this possibility.

A different attempt to explain the case discussed here within the scope of the planning theory might go as follows. Many shared intentional actions of the kind involved in such negotiations manifest *policies* of various kinds. Bratman (2014, ch.7, 2004) develops a view according to which policies provide part of the background for such joint actions as shared deliberation. Policies, the thought may be, are temporally extended planning structures that are not terminated upon the completion of the shared intentional actions that manifest sensitivity to and enactment of these policies. The policies of a philosophy department around hiring, for example, are not terminated when a new member of staff is appointed. These policies are structures that have the temporal form that was characterized as central to a state like international community—that is, they can persist despite the termination of certain characteristic telic processes that they involve—but they nevertheless seem to be explicable within the terms of Bratman’s theory.

But the notion of sharing a policy cannot be a model for international community, any more than it can be a model for being in community as members of a philosophy department. Policies about frequencies of further meetings and on the conduct of diplomatic negotiations can be revised consistently with international community continuing unchanged, as can departmental hiring policies be changed consistently with departments remaining in community. Having such policies is no doubt one feature that often characterizes such states. But it is not identical with them.<sup>27</sup> A natural thought, a thought I will pursue later briefly, is that such states of community are explanatorily prior to those structures.

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<sup>27</sup> And at least where the notion of policy retains anything of the distinctive character that it has when it is understood as an element of a planning theory, friendship is obviously not explicable in terms of the notion of shared policy.

(d) The two varieties of states of mutual responsiveness do not appear to be capable of modelling the relevant temporally extended form of community. In the case of mutual responsiveness with respect to sub-plans of the intentional action, this appears to be a state that inherits the telic aims of the sub-plans or of the intentional actions. It doesn't outlive the completion of negotiations. So it cannot be identified with such a state as international community.

The other notion of mutual responsiveness is more interesting. Understood as a state of community *qua* embodied agents and as those inhabiting a field for communication, mutual responsiveness shares atelic structure with such states as friendship or international community. Suppose you and me have been talking for a while in your office, and I bring our conversation to an end by saying: "OK, I will see you when you are next in". Our conversation terminates, but we don't—at least, not immediately—fall out of this kind of community. That this state persists is why I can say to you, just about out of your office door: "Oh, and just one more thing..." Or, if I hand you a cup of coffee and you take it, then even when that physical exchange has finished, we do not immediately fall out of community as bodily agents inhabiting the same physical space. I will not bump into you as I turn away to pick up my own cup. The completion of the joint activities that constitute this processive continuity does not terminate the continuity unless the completion of these activities occurs in virtue of, or brings about, the breakdown of the state. It is an interesting question, that I won't pursue further, what the conditions for the termination of this state.

Mutual responsiveness of this 'bodily-agential-spatial' kind is atelic, in being constituted from shared modes of activity that are atelic. That agents are mutually responsive in these

ways does not constitutively depend on any particular telic process or sub-activity, even if such processes may be part of the continuity which constitutes it. It has this in common with the temporal structure of friendship and international community.

But though these states are similar with respect to this aspect of their temporal structure, these states are clearly distinct from one another. Mutual responsiveness of these kinds is plausibly an important component of such states, specifically, of the joint activities and processes that constitute the processive continuities that characterize states such as friendship and international community. But it is distinct from what it is a component of. Physical coordination of this kind, as Bratman (2014, p. 80) notes, can occur even between soldiers shooting at one another across a battlefield.

The difference is also manifest, more importantly, in the fact that the relevant states of community play an explanatory role that this variety of mutual responsiveness does not. Mutual responsiveness of this kind is not what explains why the diplomats convened on a Tuesday morning at 9am after having been up working until 2am, and it is not what explains why, when the negotiations have been concluded, representatives of each country go away to pursue certain kinds of intentional actions geared toward selling the terms of the ceasefire to their respective countries. International community is. Mutual responsiveness is not what explains why Seth rings up Evan, hungover, in the morning, to see whether he feels as bad as he does, or why Evan gets excited by the Boba Fett helmet he found for Seth on eBay. Friendship is.

## 6. Conclusion

In sections 2- 4 I tried to motivate the idea that a range of processes of doing things together, individual actions, and events are manifestations, across an interval of time, of a basic form of social agency: the living of a shared life. That two individuals are friends can be what explains why they do things together in the way that they do, including why they do certain things together repeatedly over extended intervals of time, why they perform a range of individual actions when they are not together, and why they are in the affective states that they are in at various times. The state of community involved in a state like friendship doesn't only function as a causal explanation of two individuals doing things in these ways. It is the source of various norms for the unfolding of the relevant processive continuity. The fact that two individuals like Seth and Evan are friends is what explains not only why they will see one another again after they have walked home from Jules's party together, but why they ought to.<sup>28</sup>

The upshot of discussion in the previous section appeared to be that the notion of life lived together as friends or political representatives could not be explained in terms of notions drawn from Bratman's planning theory. If that discussion is right, there is a highly general notion of temporally extended agency that involves the obtaining of a state of community of a very general kind, and the unfolding of an atelic processive continuity constituted from events, processes and states, the character and order of which manifests such

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<sup>28</sup> I remind the reader of that my use of 'ought' here is not a moral nor a rational ought, but an ought that indicates commitment to the teleological idea that in virtue of the kinds of things they are, states, relations, processes, or activities involving living beings (indeed those living beings themselves) have a 'most complete' mode of existence that determines the specific content of the 'ought' in each case. (See fn.16 above). Further questions concerning the substantiation of this view about 'ought', as well as its relations, in cases of joint action, to rational notions of normativity, I will have to take up elsewhere. It is also a question worth exploring elsewhere whether the temporal ontology of joint action developed here has consequences for the epistemology of joint action. On the epistemology of joint action see the papers by Longworth, Satne, and Roessler, in the special edition of which this paper is a part.

community, that cannot be understood in terms of either shared intentions or an overarching plan or policy. In a community like a philosophy department, we might see the adoption and implementation of projects or long-term plans as constituents of the life the members of the department share *qua* members of the department. But so also we might see the friendly refinement, collegial renegotiation or abandonment of such policies as the constituents of the shared life of the department.

As I emphasized at the start of the paper, the purpose of the discussion in section 5 is a better understanding of the relevant form of temporally extended agency, by distinguishing it from the kinds of structures of agency involved in the planning approach. Important differences, we have seen, relate to the way that things in those categories occupy time. Even if we assume that this is correct—and showing that it is correct would seem to me to depend on further work—whether this is an objection to the project that Bratman pursues in his writings on shared agency is a quite different question, and much more delicate. I want to end by saying a few things about how I see this issue, and flagging questions for further research and friendly dialogue.

If there is a difficulty for the planning approach somewhere in the content of the discussion, perhaps it is this. The planning approach to modest sociality might sometimes seem to be presented as an account of the basic form of shared agency at work in the lives of mature, self-conscious, human beings.<sup>29</sup> What it is for it to be basic is that it is fundamental in the explanation of the ways that we act together. But perhaps the discussion provides reason to think that planning agency, the notion of planning intentions

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<sup>29</sup> See, for example, the framing discussion in Bratman (2014, ch.1). Much will turn here on how we are to understand the implications of the notion of a ‘basic’ form of sociality in such discussions. Is it consistent with such basicness that there are a plurality of such basic forms? The spirit of the introductory discussion of Bratman (2014, ch.1) appears to be that it is not. But the letter is, I think, neutral.

and actions that manifest these intentions, are not such basic elements. There is a kind of temporally extended structure of agency that corresponds to something like living a life together. It is not possible to explain the notion of shared life in terms of notions drawn from the ontology of planning agency. In fact, in explanatorily central cases, shared intentional actions, the patterns of shared intentional action over time, and associated individual actions manifest these relations of community and form elements of the relevant processive continuities. When they do so, they inherit some of the structure imposed by the prevailing state, and different aspects of these occurrences can be explained in terms of features of the state and the processive continuity that unfolds in virtue of it. Given this, it is not planning agency that is basic. What is basic is the structure associated with living life together in the relevant ways.

If that is the worry, one way for the partisan of Bratman's approach to respond to the discussion so far might be the following. It is true that shared life cannot be understood in terms of the notion of the apparatus of planning agency. It is true that in certain cases, shared intentional action and patterns of such action can be explained in terms of these states of community and the relevant continuities. But such structures are not essential for shared intentional action. Many, if not, indeed, most cases, of shared intentional action simply do not occur as part of these richer temporal structures; structures such as friendship or political community. They are one-off shared actions of handing over money to people behind the counters of coffee shops, handing passports to airline staff and receiving them back, and exchanges with cab drivers. Given this, these 'community-involving' features of shared intentional actions are not essential to their occurrence as shared intentional actions. So it is not the case that the structures of shared life are more

basic in explanation than the notion of shared intentional action. Therefore, the existence of such forms of agency is not inconsistent with the planning theory.<sup>30</sup>

This opens up a richer area for further discussion. Perhaps this response can be granted if the kinds of structures in question are the states of community and processive continuities involved in friendship, in the membership of a family, or in membership of a philosophy department. But one idea here might be that there are more fundamental states of community, and more fundamental varieties of processive continuity that mature rational human beings do stand in to one another even under conditions of pervasive partiality. Kantian ethics might provide one route towards identifying these structures. And Aristotelian metaphysical biology another. This is something for another occasion. In any case, I hope to have at least motivated the idea that attention to some of the distinctions between the ways that things occupy time, and to some of the ways in which processes, events and states—though occupying distinct temporal categories—may be related to one another in particularly central types of case, is a fruitful perspective from which to approach certain kinds of questions about joint expressions of agency.

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<sup>30</sup> These ideas reflect aspects of what Bratman (2014, p.45-6) calls the ‘pervasive partiality of modest sociality’. The pervasive partiality of modest sociality takes in the idea that in a pluralistic society most shared actions occur even though there is considerable divergence in the motivational background of the agents engaged in the shared action, their reasons for engaging in such shared intentional action, and in the kinds of values placed on the outcome of the shared action by participants.



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